DOCUMENT RESUME

ED 296 938 SO 019 261

AUTHOR Merrion, Margaret Dee; Vincent, Marilyn Curt
TITLE A Primer on Music for Non-Musician Educators. Fastback 270.
INSTITUTION Phi Delta Kappa Educational Foundation, Bloomington, Ind.
REPORT NO ISBN-0-87367-270-4
PUB DATE 88
NOTE 32p.; Publication of this fastback was sponsored by the Central Michigan University Chapter of Phi Delta Kappa.
AVAILABLE FROM Phi Delta Kappa, Eighth and Union, Box 789, Bloomington, IN 47402 ($0.75).
PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Affective Behavior; *Cognitive Processes; Developmental Psychology; Elementary Secondary Education; Learning Processes; *Learning Theories; *Music Education; *Music Theory; *Psychomotor Skills; Teacher Education

ABSTRACT

The objectives of this pamphlet are to: (1) introduce the processes of music learning to non-musician educators; (2) illustrate how music learning serves as a model for all learning; (3) enable educators to gain a new perspective of the demands and processes needed to develop musical talent; and (4) help non-musician administrators understand that music learning has many benefits beyond the public performances that entertain the community. For most individuals, music learning is developmental and requires continuing effort spread over a period of time. It has cognitive, psychomotor, and affective domains. The cognitive or intellectual component of music includes music history and a body of knowledge in music theory. The musical elements of rhythm, harmony, melody, form, style, and dynamics are the fundamentals of music theory. The psychomotor aspect of music learning involves sensory stimulation and perceptual processes; and the cognitive and psychomotor elements in the music learning process are transformed into affective learning experiences. As music is essentially an aural phenomenon, the ears play a major role in music processing. From the ear, musical impulses are picked up and transmitted via a neurological network to the brain. To help students develop musical skill and insight, music must be experienced. Musicianship can be developed to some degree by almost all persons through engaging in musical experiences. (SM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

FASTBACK

270

ED296938

A Primer on Music for Non-Musician Educators

Margaret Dee Merrion, Marilyn Curt Vincent

SO019261

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

D. KLIEWER

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PHI DELTA KAPPA
EDUCATIONAL FOUNDATION

MARGARET DEE MERRION

MARILYN CURT VINCENT

Margaret Dee Merrion is associate dean in the College of Fine Arts at Ball State University, Muncie, Indiana. She has served on the faculty of the School of Music at the University of Northern Iowa and has taught general music in public and private schools in the Chicago area. Her Ph.D. in Music Education is from the University of Missouri.

Merrion serves as national chair of a Special Research Interest Group on instructional strategies for the Music Educators National Conference. Her publications include articles in national journals on various aspects of teaching music.

Marilyn Curt Vincent is chairperson of the Division of Music Education at Ball State University, where she teaches courses in music methods and the psychology of music and supervises student teachers in music education. She has taught general music and conducted choral groups at all grade levels in public schools in Kansas. Her Ph.D. in Music Education is from the University of Kansas.

Vincent is co-author of a music methods workbook and study cassettes and is editor of the *Indiana Musicator*, the journal of the Indiana Music Educators Association. She is a piano accompanist and directs a church choir.

Series Editor, Derek L. Burleson

A Primer on Music for Non-Musician Educators

by
Margaret Dee Merrion
and
Marilyn Curt Vincent

Library of Congress Catalog Card Number 88-60072
ISBN 0-87367-270-4
Copyright © 1988 by the Phi Delta Kappa Educational Foundation
Bloomington, Indiana

This fastback is sponsored by the Central Michigan University Chapter of Phi Delta Kappa, which made a generous contribution toward publication costs.

Table of Contents

Introduction 7

Who Needs Music? 9

What Does It Take to Be a Musician? 12
- The Necessities for Being Musical 12
- Music's Human Pathway 13

What Is This Thing Called Music? 15

How Do We Learn Music? 18
- Putting It Together 22
- Tuned In 23
- Music Learning Is Holistic 26

Summing Up 27

References 30

Introduction

Most of us can recall with fondness – or bitterness – our childhood experiences in learning music. Some of us struggled to keep our clarinets in tune in the elementary school band. Some of us tested out our newly acquired adult voices by singing bass in the high school choir. Still others of us took piano lessons after school from an elderly neighborhood lady. Despite these early music experiences, or perhaps because of them, many of us abandoned our involvement with music. Why? The reason given most frequently by adults is that they did not have "what it takes" to continue in music. This fastback has been written to help the non-musician educator understand how children and youth learn music and, in the process, learn "what it takes" to become musically literate.

With the competition for time in the curriculum to teach basic skills and to meet increased high school graduation requirements, music education is apt to be neglected. Music educators must compete for time and attention. They would welcome some support from their non-musician colleagues. All educators should know the "basics" of music education in order to guide children and youth in their total development. This fastback will explain to them what goes on in the process of music learning, the results of which are seen in the holiday assembly, the spring concert, or the marching band show at half-time at the football game.

The authors had four objectives in mind when writing this fastback. First, because educators are students of learning, they will find the processes of music learning interesting in themselves. Understanding the uniqueness of musical processing removes some of the mystique about learning music. In reviewing the processes of music learning, educators will recall familiar musical experiences from their childhood; but from their adult perspective, they will approach music learning in an enlightened way.

Second, the music learning processes serve as a model for all learning. Music learning engages the student holistically, involving cognitive, psychomotor, and affective experiences. In addition, the processes nurture discipline and creativity in the learner, resulting in an affective experience that gives music its character and soul.

Third, as educators learn more about the processes of music learning, they will gain a new perspective of "what it takes" to develop musical talent. They will come to appreciate the efforts of music teachers, beginning at the earliest levels, to develop musical understanding and to engage youngsters in all types of musical expression.

Finally, this fastback will help non-musician administrators to understand that music learning has many benefits beyond the public performances that entertain the community.

Who Needs Music?

Music is ubiquitous. Few can escape its pervasive soundscape, even though some of us might wish it were banned from restaurants and dentists' offices. Music's ubiquity is not a phenomenon of only Western culture. All nations, all tribes engage in musical activities. Music intrigues and delights those who listen to, perform, or create it. Music is an outlet for expression of feelings. Music celebrates life. In short, experiencing music is part of being human.

According to the 1980 census, about 130,000 persons were employed as musicians and composers in the United States. This figure does not include persons in the music-related occupations such as music teachers, recording engineers, music publishers, and so forth. While only a small percentage of the population actually makes a living as musicians, almost all of us incorporate music into our lives in one form or another.

Hundreds of millions of dollars are spent annually for concerts. Bruce Springsteen grossed $40 million for 39 of his rock concerts. And the classical music concert season is holdng its own, too. According to the American Symphony Orchestra League, approximately $184.9 million was spent on symphony orchestra concerts during the 1985-86 season. This country boasts more than 1,500 orchestras, including major symphony orchestras in large metropolitan areas, community orchestras, chamber groups, and college and youth orchestras. Another measure of the impact of music in people's lives

is sales of recorded music. Standard and Poor's 1986 Industrial Surveys estimate $4.7 billion was spent on musical recordings. This figure does not include the fast-growing market in home music videos, compact discs, and digital audio tapes.

Some believe that the teenage market accounts for most of the sales of recorded music. But this is not necessarily the case. Studies by the Recording Industry Association of America from 1979 to 1984 show that the 35-and-over age group accounted for 29% of recorded music sales. Forecasts indicate that sales of recorded music will increase because of greater leisure time available for the entire population.

It appears, then, that music will continue to be a pervasive influence in our lives. We all seem to need music; and young persons must be prepared for the lifelong association with music they will encounter when worshipping in church or synagogue, when driving their cars or exercising in a health spa, or when participating in the rituals

These young women participate in the musical life of the community as members of a church bell choir.

of birth, marriage, and death. Throughout life, people will engage in different musical activities – the children's chorus in third grade, the pep band in high school, the bell choir in church, the choral society in the community, the pick-up band at the senior citizens' center. Regardless of the kind of involvement, music is ever present in our lives.

What Does It Take to Be a Musician?

Non-musicians are often of the opinion that it takes some special gift, some inherited trait, to be a musician. Such an attitude is reinforced by some professional musicians, who take the elitist stance that they have a God-given talent that separates them from the rest of us. And because musicians may appear to play or sing without effort or to compose and improvise as if by some magical formula, many non-musicians accept the "special gift" myth. Sometimes even well-meaning parents and teachers perpetuate the myth by making such remarks as: "He's a born musician!" or "She's just a natural talent." Let's look at what it really takes to be a musician.

The Necessities for Being Musical

The psycho-physical necessities for being musical are similar to those for any other kind of mental processing. A would-be musician needs ears, neural pathways, and a brain. And if one's definition of "being musical" includes performing, then some kind of physical dexterity might be helpful. "But," the skeptic will ask, "why are some persons so very musical while I am not? I have ears, nerves, and a brain!" The answer to that question has more to do with developmental learning processes than with body organs. Although research clearly points to the importance of early musical training as the optimal route to nurturing talent, adult beginners still can attain levels of musicality that are personally satisfying and rewarding.

Nevertheless, there is no disputing that certain individuals are simply more musical than others. They are the ones who can sing a tune after hearing it once, who can sit down at the piano and play anything "by ear," or who harmonize while everyone else sings the melody. These are the persons who are often described as having "innate talent." These are the persons who sing or play the solos and receive the acclaim of audiences. But pleasing an audience is not the primary goal of music education, and performing for others is not a requirement for attaining musicality. Music instruction in public schools is not directed toward a small group of talented individuals, although it can, and does, enhance talented students' musical development by providing them with rich and varied musical opportunities. School music instruction should be available to every student who wants to study music. A high level of musical talent is not a prerequisite for that study.

There is also the self-appointed "I can't carry a tune in a bucket" group (most of them are incorrect in their assessment), who shy away from anything musical. Admittedly, there are wide variations in musical sensitivity, which supports the hypothesis that some elements of musicality may, indeed, be inherited rather than learned. Without getting into an extended discussion about the nature/nurture controversy regarding musicality, a brief explanation of the path music travels in listeners or performers may be helpful in understanding the potential musicality within all persons.

Music's Human Pathway

Music is essentially an aural phenomenon. Thus the ears play a major role in music processing. The cochlea, that part of the inner ear whose function is to transform pressure variations into electrochemical signals, cannot regenerate and cannot be developed through stimulation like a muscle can. One's hearing is probably as acute at birth as it will ever be. Music processing is facilitated with a good pair of ears. Fortunately, most people hear well enough to process musi-

cal sounds. An individual's music processing is limited only by the quality of ears he or she inherits at birth. (This is not to discount the remarkable achievements from using music therapy with deaf persons.)

From the ear, musical impulses are picked up and transmitted via a neurological network of astounding complexity. Although the time required for the ear to process sound is minimal (up to .05 seconds), the time required for neural transmission is somewhat longer (up to .10 seconds). At the neural transmission level, musical processing can be improved somewhat by training (Roederer 1978).

From the ear and through the neural pathway, the musical message reaches the brain. In the brain the musical processing takes the longest time (.10 seconds or longer). It is here, at the "thinking" level, that the greatest potential for learning occurs. Yes, our brain is subject to change through training or instruction! This should be good news for all those who question their musical "inheritance." In summary, being musical is a normal physiological process requiring only sensory input (musical sounds), which are then transmitted through the ears and neural pathways to the brain. And through instruction and training, the brain can be changed into a "musical brain." Clearly, then, music education is the "yellow brick road" to some degree of musicality for most individuals.

What Is This Thing Called Music?

To ask what music is seems like a silly question. Of course, everyone knows what music is. Or do they? Some think music is lines and spaces, sharps and flats. Others think music is singing in the choir or playing in the marching band. Still others maintain that music is listening to compact discs, watching MTV, or going to concerts.

Music has been described as "mysterious," and some aspects of it no doubt are to many people. But music need not be mysterious. It can be analyzed and studied; its effects can be described both objectively and subjectively. First of all, music is sound. Musicians prefer to think of music as organized sound. There is a difference, for example, between the sounds of a clicking typewriter and the organized sounds of African drum calls. Both have a rhythm, but the drum calls communicate a message and elicit an emotional response.

Perhaps the most mysterious aspect of music is its capacity to generate feelings and emotions, whether alone, with a group of friends, or in a concert hall with hundreds of others. Emotional response is a major outcome of music. Composers write music with expressive intent, and performers interpret music to create an emotional response in their audiences.

Music has its own content, which students need to learn and apply. Musical content includes: 1) ideas or musical concepts; 2) skills such as singing, playing an instrument, and listening to and reading music; and 3) affective components such as appreciation, feelings, and meanings.

Understanding a musical concept involves more than just absorbing a few facts about the inner workings of music. For example, one can learn a definition of a basic musical concept such as the 4/4 time signature, which indicates that a quarter note receives one count and there are four counts to a measure. However, to really understand time and rhythm, it must be experienced musically. Rattling off the definition of a musical concept without experiencing it aurally and affectively and without performing it has relatively little value for developing musicality.

Certainly, there is cognitive content to be learned within the discipline of music, but it is best learned through aural experiences and musical activity. Students can learn all musical concepts through various kinds of musical activities. The major concepts include rhythm, melody, harmony, form, style, tone color, and dynamics. These constitute the structure and inner workings of music. By becoming familiar with these concepts, students find meaning in music as they perform it, listen to it, or create it.

Like musical concepts, musical skills also are learned through musical activities, such as singing, playing an instrument, listening critically, reading music, moving to music, and creating music. Elementary music teachers provide a variety of activities to help students develop some degree of musical skill. At the secondary level skills are developed primarily through some form of performance. Unfortunately, as students progress through their formal education, there are fewer opportunities to develop musical skills.

It is in the affective realm, dealing with feelings and appreciation, that many music teachers believe they can make the most important contribution. Feelings generated during expressive musical experiences help students to become sensitive to the power and beauty of music. Students may not remember the year when Beethoven was born, the number of symphonies Haydn composed, or the difference between Baroque and Renaissance styles. But what they do retain is

an interest in and appreciation for a wider range of the musical repertory, which has the power to evoke strong emotional responses.

Some aestheticians have described music as analogous to life itself – its ebb and flow, its passage through time, its highs and lows, its discords and harmonies. Using such an analogy, we might expect music to "do something to us." But the music itself can only initiate the action – the listener or performer must participate actively by listening to or executing the organized sounds in order for the affective responses to emerge. And although we do not fully understand the neural connections that allow such communication to occur, it seems clear that some subcortical effects are at work in music processing that create the feelings and emotions associated with music.

How Do We Learn Music?

For most individuals (including the musically talented), music learning, like language learning, is developmental and requires continuing effort spread over a period of time. Those who conclude that they are not musical after two or three months of study have unrealistic expectations about what it takes to achieve musical competency. Such competency does not occur instantaneously.

Music has much in common with learning in other content areas. It has its cognitive, psychomotor, and affective domains. However, music learning involves some distinctive processes related to the interdependence of the cognitive, psychomotor, and affective domains. For example, a piano student when trying to master a Bach "Invention" will practice for hours (psychomotor) in order to perform it properly. At the same time, the student may be learning, with the help of a teacher, the dynamic levels and the subtle stylistic ornaments in the composition. Or the student may learn more about the Baroque style in which Bach wrote by reading about the historical period in which Bach lived or by listening to compositions by some of his contemporaries – all cognitive elements in music learning. But in the process of engaging in these psychomotor and cognitive elements of Bach's "Invention," the piano student experiences the affective elements unconsciously and involuntarily.

Is there some mystery in how the cognitive and psychomotor elements in the music learning process are transformed into affective

learning experiences? The mystery exists in what is experienced by the listener or performer, not in the process itself. The process of affective learning involves music's expressive qualities, such as rhythm, tempo, melody, harmony, and the use of repetition and contrast. All these musical elements help shape the expressive message. These musical elements create a mood or musical ambience, which stirs a feeling within the listener. That is the magical part. The musical elements themselves are not.

The cognitive or intellectual component of music, which qualifies it as an academic discipline, includes music history and a body of knowledge in music theory. The basic musical elements of rhythm, harmony, melody, form, style, and dynamics are the fundamentals of music theory. Students develop musical concepts and insights through performing, creating, and listening to music. These three activities are the major channels by which students come to understand musical ideas. They also are the direct routes to music appreciation.

When students perform by singing or playing instruments, it enables them to develop musical skills needed to experience musical ideas. For example, the musical idea of "scale" can be defined abstractly as a series of eight pitches in a special interval pattern of whole and half steps. But to grasp the musical idea of "scale," it is necessary that students have the aural experience of singing or playing a scale.

Methods used to learn musical ideas must be appropriate to the maturity level of the group. For example, when kindergartners sing "I'm a Little Teapot" with the traditional body and hand motions, they are learning a basic understanding of the concept of melodic direction. As the melody moves upward, so do their hand motions. As the melody moves downward, their bodies lean down to "pour out the tea." Vocally, aurally, and kinesthetically they are experiencing melodic direction. With repeated encounters with melodies, children are able to generalize and transfer the idea of melodic direction to other music.

Cognitive learning of musical elements takes place in performance settings as well. Members of a junior high string orchestra can begin

The musical concept of scale and its intervals becomes clear as these children experiment on xylophones.

to understand harmonic texture when they perform a composition with sections scored first for single instruments, then for two instruments, and finally for the full orchestra. While listening to their own and others' sections, they come to understand how the harmonic structure develops. Likewise when a chamber choir performs a sixteenth-century motet and each voice part makes its entrance and imitates the voice part that preceded it, the singers come to understand the imitative form in the composition. By performing many different kinds of music, students become more sophisticated about the inner workings of music.

If students are to develop their understanding of musical ideas, they must have varied experiences that build on the aural dimensions of music. For example, when teaching students about rhythm and meter, they can dance a waltz pattern in order to feel triple-meter beats of a waltz tempo. Or they can sing songs like "Happy Birthday" and

"America" to experience vocally the triple-beat pattern. They can conduct the triple-beat pattern to "Down in the Valley" and use rhythm sticks to accompany other songs having a definite triple-beat pattern. With these kinds of experiences, students will eventually be able to look at a score with a 3/4 time signature and make the connection with their earlier aural associations of triple-beat meter.

Through repeated and varied activities, students are using skills associated with all the elements of music. When visiting a music class on a particular day, one may find students singing, playing rhythm sticks, improvising, conducting, or learning how to read music. While using these skills, students are simultaneously acquiring musical ideas.

"Psychomotor" in music learning means "doing it." This involves all the physical machinery used in making music. This includes dancing or interpretive movement, playing a musical instrument, singing, or conducting. If students are to produce music, they have to acquire a certain level of proficiency in the psychomotor domain. How does a student learn in this domain?

First, the musical skill is demonstrated by a "model." It could be the teacher or even a recording. The learner carefully observes and listens to the model. Second, the learner imitates the model. Third, the learner refines the performance through practice. To illustrate, the Suzuki violin student first watches and listens to the model teacher play a simple tune. Then the student tries to play the tune just like the teacher's performance. The student continues to practice with occasional guidance from the teacher until the performance is accurate and polished.

Psychomotor learning involves sensory stimulation (ear, eye, hand) and perceptual processes (forming percepts) during the first stage of learning. Within an instant, messages are sent from the stimuli to the brain and then on to the muscles. Psychomotor learning is actually directed from the brain, not the muscles. Just as a tennis player has a mental strategy for returning a serve, so a pianist mentally rehearses playing a passage before actually hitting the keys. Repetition and prac-

21

tice establish neural paths and muscle tone necessary for skillfully executing musical ideas.

Something very important happens within the "psycho" part of psychomotor learning. The learner becomes aware of the qualities and relationships of what is performed. These are known as percepts. For example, as church choir members hear their director sing a phrase that they are to imitate, they are aware of the intonation, pitch, voice placement, dynamics, breath support, diction, and tempo. With practice, the choir members' percepts become musical ideas, which they execute in performance. Psychomotor learning processes, then, result in much more than a polished performance. A choir's rehearsal time may be spent sharpening vocal skills, but its members also are developing musical ideas and gaining an appreciation of the music literature they are singing.

Putting It Together

A music classroom is closer to a creative laboratory than to a concert hall. It is a laboratory in which students explore and discover the music potential within themselves. Once they have been given a green light, they can go ahead and cross the street to invention, trying new ideas and reshaping or improvising on standard music they have been performing.

Creativity can take two forms in the laboratory: improvising or composing. Some musical improvising may sound extremely complex to the untrained listener. A jazz group can astound audiences by embellishing the melodic line to the point where the melody seems almost obscured. Barbra Streisand improvises by simple use of grace notes, fermatas, and straight-tone-into-vibrato long notes. Novice musicians also should have opportunites to improvise vocally and instrumentally, beginning with such simple techniques as changing tempos.

In contrast to improvising, composing requires careful planning and organization of musical sounds. Composers control the elements of music in order to create original pieces that express what they want

to communicate. They often revise and edit their compositions a number of times until they are satisfied. For example, it is reported that Beethoven discarded pages and pages of revisions before he was satisfied with what finally became his famous Symphony No. Five in C Minor.

In both improvising and composing music, students use their acquired skills to work directly with musical elements. These hands-on creative experiences give students an opportunity to express whatever musical ideas or feelings are pooled up inside them. Through such experiences novice composers can solve musical problems and give shape to their creative urges. Whether it is a 17-year-old saxophone player spinning out new musical material in a high school jazz ensemble or a five-year-old chanting improvisations on the schoolyard swing, their musical potential is being tapped. It is this affective process that makes music unique.

Tuned In

Most of music learning is aural. Other terms used to describe aural are "inner hearing," "audiation," or simply listening with understanding. Inner hearing or audiation is what happens when music is thought through "in the head." The audiation process is not fully understood, although most persons use it when they mentally sing through a song they have previously learned. What is more difficult to understand is how a Tchaikovsky can "hear" a symphony while composing it and before it is actually performed. Even more remarkable is how Beethoven was able to compose his great Ninth Symphony while totally deaf. How could he "hear" what he was composing? Through audiation he was able to draw from his lifelong databank of musical sounds from the time when he could hear and then cast them into wonderful new combinations of sound patterns and formations. While only the musically gifted use audiation at a level of a Tchaikovsky or a Beethoven, it is a normal, human process, which can be refined through experience and training. In contrast, listening is where one

23

hears music from some outside source such as a recording. Both audiation and listening are important concepts for understanding how we learn music.

Listening is so taken for granted that it tends to be overlooked in the framework of music instruction. When students listen well, they sing well, they play their instruments more proficiently, they read music more accurately, and they develop more creative ways to engage in music.

One way of listening is simply repeated exposure to a musical piece, which eventually results in some awareness of its structural characteristics. Repetition is important in learning to listen to music. For example, many television shows have a musical theme, which the viewer hears at the opening of every episode. After repeated hearings, the listener begins to focus on one or more musical elements – a syncopated rhythm pattern, a brass fanfare, or lush strings playing the melody. These casual exposures to music may result in music

These students are developing harmonic sense by singing three-part music for female voices.

learning; but, at best, the repetition-saturation process is haphazard and slow. Music teachers prefer to structure listening experiences with specific instructional objectives in mind. They can help novice listeners to focus on musical elements, starting with the obvious ones and progressing to more subtle ones. Through a sequence of listening lessons, students become aware of nuances of musical structure and expression.

To illustrate the levels of sophistication in listening, consider the following situations:

Situation A: While a group of seventh-graders are painting in an art class, a recording of Debussy's "Golliwogg's Cakewalk" is playing in the background. They paint. They talk. Some seem to "sing along" with the piano piece. They are hearing the music but have little engagement with it.

Situation B: Another group of seventh-graders in a music class keep the beat by tapping their feet while listening to the syncopated rhythms of "Golliwogg's Cakewalk." On listening a second time, they clap the off-beat rhythms against the foot beat. They are hearing music, too, but are engaged in one of the composition's musical elements – rhythm.

Situation C: This classroom of seventh-graders has already listened to "Golliwogg's Cakewalk" several times. They now are conducting the beat patterns and cuing the accented rhythms in the piece. Because all cues must precede the aural occurrence of the accents, they are using inner hearing or audiation to guide their movements.

In Situation A, music functions as wallpaper – something in the room that is not intrusive and only in the background. The music is peripheral to the learning activity. The students do not pay much attention to it, but they do hear it.

In Situation B, the students must pay some attention to the music in order to execute the rhythm patterns. The music functions as the center of the learning activity. The students hear the same piece of music as the students in Situation A, but they are focused on a specific musical element.

Students in Situation C have developed their inner hearing to a point where they can anticipate the cues needed to conduct the syncopated rhythms in the music. They "know" the piece aurally. Even without the music being audible, they can conduct the appropriate movements. These students are using listening skills at the highest level – audiation.

These illustrations show the different levels in listening. Music teachers devote much instructional time to developing students' aural acuity, because aural processes are central to music learning.

Music Learning Is Holistic

As well as being an aural art, music is a time-bound art form. But time in the context of music does not mean simply a series of notes. In order to find meaning and form in music, listeners have to capture time as units or wholes. Time is what creates the relationships among all the elements of music: rhythm, melody, dynamics, texture, and tone color. In performing music, time also is the primary factor that determines how the performer relates all the musical elements to one another. The performer must have an auditory sense (audiation) of how the music should sound and at the same time execute the sound so that it replicates the audiation.

When people learn music by rote, that is, without being able to read musical notation, they are able to reproduce the musical phrases and note durations as they have heard them. They hear music holistically and not as a series of individual notes. Even very young children are able to do this when they learn to sing a nursery rhyme. What happens in music processing in the brain is that the listener retains the sounds past, attends to what is occurring at the moment, and anticipates what will happen next. Compared to other types of listening, the simultaneity of the processes in musical listening is quite remarkable. Even though every element in music can be dissected and analyzed separately, musical meaning is derived through holistic processes.

Summing Up

Consider the following scene in a kindergarten classroom that might take place in any elementary school on a given day:

Twenty-four kindergartners race to their seats in the music room, eager to discover what special activities their music teacher has in store for them this afternoon. One stops to strum her fingers across the xylophone. Their faces glow with anticipation; their little bodies are poised for activity; their voices are gleeful. They expect a happy class. Maybe they will play the rhythm sticks, or learn the second part of the "Mexican Hat Dance," or sing a new song, or listen to a new instrument. They may even make up their own music today. Music means something to these five-year-olds.

How are these five-year-olds able to find meaning in music? What power does music exert over listeners aged five, fifty-five, or seventy-five? It is the affective dimension of music that allows or invites persons of all ages, of all musical abilities, to sort out and understand feelings they experience in music. People have always found meaning in music. Throughout history music has been used to prepare warriors for battle, to talk to the gods, to charm a snake out of a basket. And although the power of music really lies within the perceiver, the conditions that make it possible for the affective experience to take place can be taught.

Ultimately, learners must discover music's meaning for themselves. But with skillful instruction this discovery comes sooner and with

27

Being able to sing a major choral work is the result of these students' many years of work to develop musical understanding.

greater intensity. After the marching band plays its last half-time show, after the last selection in the spring choral festival is sung, and after the statewide orchestra contest winners are announced, all the participants who have experienced the power of music will continue to make music. They have found their own meaning.

Everyone has the ability to find meaning in music. It is not reserved for only the musically talented. Yes, some persons learn faster and better than others and are applauded for their performances. But with music the audience is not the final judge. Music is its own personal and private pleasure. Anyone who has sung in a fine choir or listened to an excellent symphony orchestra has found personal meaning in the experience and "knows" the feelings associated with it.

What, then, can music education do to help students develop musical skill and insight? The guiding premise is that music must be ex-

perienced. Students must be immersed in all kinds of musical sounds. And they must be taught the skills of creating musical sounds in all their infinite variety.

Finally, students must be convinced that there is a musician in each of them. Musicianship is not a prepackaged gift bestowed on a few lucky individuals. It can be developed to some degree by almost all persons by engaging in musical experiences.

29

References

American Symphony Orchestra League. *Ten Year Financial Report on American Orchestras.* Washington, D.C., 1987.

Hodges, Donald A. "Neurophysiology and Musical Behavior." In *Handbook of Music Psychology*, edited by Donald A. Hodges. Lawrence, Kan.: National Association for Music Therapy, 1980.

Roederer, Juan G. *Introduction to the Physics and Psychophysics of Music.* New York: Springer-Verlag, 1978.

PDK Fastback Series Titles

8. Discipline or Disaster?
20. Is Creativity Teachable?
22. The Middle School: Whence? What? Whither?
29. Can Intelligence Be Taught?
30. How to Recognize a Good School
43. Motivation and Learning in School
47. The School's Responsibility for Sex Education
59. The Legal Rights of Students
66. The Pros and Cons of Ability Grouping
70. Dramatics in the Classroom: Making Lessons Come Alive
78. Private Schools: From the Puritans to the Present
79. The People and Their Schools
81. Sexism: New Issue in American Education
83. The Legal Rights of Teachers
86. Silent Language in the Classroom
87. Multiethnic Education: Practices and Promises
88. How a School Board Operates
91. What I've Learned About Values Education
92. The Abuses of Standardized Testing
93. The Uses of Standardized Testing
95. Defining the Basics of American Education
100. How to Individualize Learning
105. The Good Mind
107. Fostering a Pluralistic Society Through Multi-Ethnic Education
108. Education and the Brain
111. Teacher Improvement Through Clinical Supervision
114. Using Role Playing in the Classroom
115. Management by Objectives in the Schools
118. The Case for Competency-Based Education
119. Teaching the Gifted and Talented
120. Parents Have Rights, Too!
121. Student Discipline and the Law
123. Church-State Issues in Education
124. Mainstreaming: Merging Regular and Special Education
127. Writing Centers in the Elementary School
128. A Primer on Piaget
130. Dealing with Stress: A Challenge for Educators
131. Futuristics and Education
132. How Parent-Teacher Conferences Build Partnerships
133. Early Childhood Education: Foundations for Lifelong Learning
135. Performance Evaluation of Educational Personnel
137. Minimum Competency Testing
138. Legal Implications of Minimum Competency Testing
141. Magnet Schools: An Approach to Voluntary Desegregation
142. Intercultural Education
143. The Process of Grant Proposal Development
145. Migrant Education: Teaching the Wandering Ones
146. Controversial Issues in Our Schools
147. Nutrition and Learning
148. Education in the USSR
149. Teaching with Newspapers: The Living Curriculum
151. Bibliotherapy: The Right Book at the Right Time
153. Questions and Answers on Moral Education
154. Mastery Learning
155. The Third Wave and Education's Futures
156. Title IX: Implications for Education of Women
157. Elementary Mathematics: Priorities for the 1980s
159. Education for Cultural Pluralism: Global Roots Stew
160. Pluralism Gone Mad
161. Education Agenda for the 1980s
162. The Public Community College: The People's University
163. Technology in Education: Its Human Potential
164. Children's Books: A Legacy for the Young
165. Teacher Unions and the Power Structure
166. Progressive Education: Lessons from Three Schools
167. Basic Education: A Historical Perspective
168. Aesthetic Education and the Quality of Life
169. Teaching the Learning Disabled
170. Safety Education in the Elementary School
171. Education in Contemporary Japan
172. The School's Role in the Prevention of Child Abuse
174. Youth Participation for Early Adolescents: Learning and Serving in the Community
175. Time Management for Educators
176. Educating Verbally Gifted Youth
179. Microcomputers in the Classroom
180. Supervision Made Simple
181. Educating Older People: Another View of Mainstreaming
182. School Public Relations: Communicating to the Community
183. Economic Education Across the Curriculum
184. Using the Census as a Creative Teaching Resource
185. Collective Bargaining: An Alternative to Conventional Bargaining
186. Legal Issues in Education of the Handicapped
187. Mainstreaming in the Secondary School: The Role of the Regular Teacher
188. Tuition Tax Credits: Fact and Fiction
189. Challenging the Gifted and Talented Through Mentor-Assisted Enrichment Projects
190. The Case for the Smaller School
191. What You Should Know About Teaching and Learning Styles
192. Library Research Strategies for Educators
193. The Teaching of Writing in Our Schools
194. Teaching and the Art of Questioning
195. Understanding the New Right and Its Impact on Education
196. The Academic Achievement of Young Americans
197. Effective Programs for the Marginal High School Student

(Continued on inside back cover)

Fastback Titles *(continued from back cover)*

198. Management Training for School Leaders: The Academy Concept
199. What Should We Be Teaching in the Social Studies?
200. Mini-Grants for Classroom Teachers
201. Master Teachers
202. Teacher Preparation and Certification: The Call for Reform
203. Pros and Cons of Merit Pay
205. The Case for the All-Day Kindergarten
206. Philosophy for Children: An Approach to Critical Thinking
207. Television and Children
208. Using Television in the Curriculum
209. Writing to Learn Across the Curriculum
210. Education Vouchers
211. Decision Making in Educational Settings
213. The School's Role in Educating Severely Handicapped Students
214. Teacher Career Stages: Implications for Staff Development
215. Selling School Budgets in Hard Times
216. Education in Healthy Lifestyles: Curriculum Implications
217. Adolescent Alcohol Abuse
218. Homework—And Why
219. America's Changing Families: A Guide for Educators
220. Teaching Mildly Retarded Children in the Regular Classroom
221. Changing Behavior: A Practical Guide for Teachers and Parents
222. Issues and Innovations in Foreign Language Education
223. Grievance Arbitration in Education
224. Teaching About Religion in the Public Schools
225. Promoting Voluntary Reading in School and Home
226. How to Start a School/Business Partnership
227. Bilingual Education Policy: An International Perspective
228. Planning for Study Abroad
229. Teaching About Nuclear Disarmament
230. Improving Home-School Communications
231. Community Service Projects: Citizenship in Action
232. Outdoor Education: Beyond the Classroom Walls
233. What Educators Should Know About Copyright
234. Teenage Suicide: What Can the Schools Do?
235. Legal Basics for Teachers
236. A Model for Teaching Thinking Skills: The Inclusion Process
237. The Induction of New Teachers
238. The Case for Basic Skills Programs in Higher Education
239. Recruiting Superior Teachers: The Interview Process
240. Teaching and Teacher Education: Implementing Reform
241. Learning Through Laughter: Humor in the Classroom
242. High School Dropouts: Causes, Consequences, and Cure
243. Community Education: Processes and Programs
244. Teaching the Process of Thinking, K-12
245. Dealing with Abnormal Behavior in the Classroom
246. Teaching Science as Inquiry
247. Mentor Teachers: The California Model
248. Using Microcomputers in School Administration
249. Missing and Abducted Children: The School's Role in Prevention
250. A Model for Effective School Discipline
251. Teaching Reading in the Secondary School
252. Educational Reform: The Forgotten Half
253. Voluntary Religious Activities in Public Schools: Policy Guidelines
254. Teaching Writing with the Microcomputer
255. How Should Teachers Be Educated? An Assessment of Three Reform Reports
256. A Model for Teaching Writing: Process and Product
257. Preschool Programs for Handicapped Children
258. Serving Adolescents' Reading Interests Through Young Adult Literature
259. The Year-Round School: Where Learning Never Stops
260. Using Educational Research in the Classroom
261. Microcomputers and the Classroom Teacher
262. Writing for Professional Publication
263. Adopt a School—Adopt a Business
264. Teenage Parenthood: The School's Response
265. AIDS Education: Curriculum and Health Policy
266. Dialogue Journals: Writing as Conversation
267. Preparing Teachers for Urban Schools
268. Education: By Invitation Only
269. Mission Possible: Innovations in the Bronx Schools
270. A Primer on Music for Non-Musician Educators
271. Extraordinary Educators: Lessons in Leadership
272. Religion and the Schools: Significant Court Decisions in the 1980s
273. The High-Performing Educational Manager

This fastback and others in the series are made available at low cost through the Phi Delta Kappa Educational Foundation. Single copies of fastbacks are 90¢ (75¢ to Phi Delta Kappa members). Write to Phi Delta Kappa, Eighth and Union, Box 789, Bloomington, IN 47402 **for quantity discounts for any title or combination of titles.**